Arizona Department of Transportation, Environmental Planning Group, Qualification Requirements for On-Call Consultants, or Project Consultants working on biological resource components of ADOT projects in Development, Maintenance or Construction.

FISH, WILDLIFE and/or PLANT BIOLOGIST (General) - Authorized duties include: field reviews, writing biological review documents, general Federal T and E species habitat evaluations, general Federal, State and Tribal Sensitive species habitat evaluations, species surveys*, surveying for native plants, noxious weed surveys, riparian/wetland delineations (with 404 expert oversight, when appropriate), and other duties as approved by ADOT. Authorized duties under senior level supervision include: preparation of monitoring reports, preparation of "no effect" biological evaluations, preparation of "may affect" habitat and species impact evaluations. Duties completed under the supervision of a senior level biologist must be completed efficiently without duplication of effort.

QUALIFICATION REQUIREMENTS: Successful completion of a full four-year course of study in an accredited college or university leading to a bachelor's or higher degree, which included a major field (24 semester hours) of study in biological sciences, agriculture, natural resource management, or related disciplines appropriate to the services provided or a combination of education and equivalent experience totaling a minimum of 4 years.

<u>WILDLIFE</u>, <u>FISHERY and/or PLANT BIOLOGIST</u> (Senior)- Authorized duties include: oversight of general level biologists, completion of activities as outlined above for general level biologists, preparation of monitoring reports, completion of "may affect" habitat and species impact evaluations, completion of "may affect" biological evaluations, completion of complex "no effect" biological evaluations, species surveys*, policy or listing analysis, and other duties as approved by ADOT.

QUALIFICATION REQUIREMENTS: 1) Professional knowledge and competence in the science of wildlife and fishery biology and/or plant biology to perform work in evaluating the impact of construction projects or maintenance activities that present potential or actual adverse effects on wildlife, fish or plant resources and their habitats; 2) Professional knowledge and competence in the application of biological facts principles, methods, techniques and procedures necessary for the conservation and management of wildlife, fish and plant resources and their habitats. 3) Successful completion of a full four-year course of study in an accredited college or university leading to a bachelor's or higher degree in biological science which included at least 12 semester hours in wildlife biology, and/or botany, in such subjects as general zoology, invertebrate or vertebrate zoology, comparative anatomy, physiology, genetics, ecology, cellular biology, parasitology, entomology, or research courses in such subjects. Nine semester hours must be completed in such wildlife and/or fisheries courses as mammalogy, ornithology, animal ecology, limnology, ichthyology, fishery biology, aquatic botany, aquatic fauna, oceanography, fish culture or wildlife/fisheries management or research courses in the field of wildlife/fishery biology; or nine semester hours in botany, plant systematics, plant identification, plant biology/physiology, or the related plant disciplines. This requirement may be met through a combination of education and equivalent experience totaling 4 years. 4) This qualification must also posses either a masters degree in a biological related field with 1 year of relative experience, or 3 additional years of relative experience

*Individuals completing survey work must be permitted by the US Fish and Wildlife Service and appropriate Tribal or State Game and Fish management authorities. If threatened or endangered species detection during survey is likely, a senior level biologist must be present during surveys.